

Claims:

1. A method of attaching an identification tag to parts or sub assemblies of a semiconductor process tool, comprising:
  - forming a shallow cup in the part or sub assembly of the semiconductor processing tool; and
  - placing the identification tag in the cup;
2. A method of employing an identification tag with parts or sub assemblies of a semiconductor process tool, comprising:
  - attaching the identification tag to the part or sub assembly of the semiconductor processing tool.
3. The method of claim 2, wherein the attaching includes adhering the identification tag to the part or sub assembly with adhesive.
4. The method of claim 2, wherein the attaching includes affixing the identification tag by means of a mechanical fastener.
5. A method of detecting the presence or absence of an identification tag at a location using a sensing coil, the tag being responsive to radio frequency energy, comprising:
  - applying a swept radio frequency signal to the coil; and
  - determining if a dip in coil voltage is present.
6. A method of detecting the presence or absence of a plurality of identification tags responsive to radio frequency energy, comprising:
  - applying a swept radio frequency signal to the sensing coil; and
  - associating a dip in sensing coil voltage with an identification tag;
  - wherein each of the plurality of identification tags is constructed to be resonant at different frequencies.
7. A method of identifying a part or assembly in a semiconductor processing tool, the part having an identification tag attached, the tag being responsive to radio frequency energy, comprising:

applying a swept radio frequency signal to the coil;  
determining a frequency at which a dip in coil voltage is present; and  
determining the presence or absence of the part or assembly from the  
frequency at which the dip occurs.

8. A method of identifying parts or assemblies in a semiconductor processing tool, the parts each having an identification tag attached, each identification tag be responsive to radio frequency energy, comprising:

applying a swept radio frequency signal to the sensing coil;  
associating a dip in sensing coil voltage associated with each  
identification tag;

wherein each of the plurality of identification tags is constructed to be resonant at different frequencies, and

determining the presence or absence of the parts or assemblies from the frequencies at which the dips occur.

9. An assembly comprising:

a part or assembly of a semiconductor processing tool; and  
an identification tag attached to the part or assembly, the tag being responsive to radio frequency energy of a particular frequency.

10. An semiconductor processing tool comprising:

a processing chamber;  
a plurality of parts or assemblies attached to or disposed in the processing chamber; and

an identification tag attached to each of the parts or assemblies, each identification tag being responsive to radio frequency energy of a different frequency.